USC Viterbi
School of Engineering

FRANK PANG

2252 Mahalo Street, Honolulu, Hawaii, 96817
fpang@usc.edu | 808-485-7494

EDUCATION

University of Southern California *B.S. in Computer Engineering & Computer Science* **Expected May 2021**

Relative Coursework: Intro to Computer Programming (C++), Intro to Embedded Systems, Multivariable Calculus, Linear Algebra & Differential Equations, Mobile Application Technologies.

Cumulative GPA: 3.82

President William McKinley High School **May 2017**

Relative Coursework: AP Calculus I & II, AP Physics, Electronics I & II, Principles of Engineering, PLTW Engineering Design.

Cumulative GPA: 4.19; *Un-weighted GPA*: 4.00

WORK EXPERIENCE

Ronald Tutor Campus Center Associate and Consultant *(15hrs/week)* **Oct 2017 – Present**

- Organized event layouts for multiple extracurricular events and ensured event setups ran smoothly while teaching incoming workers about job resources to improve event setup productivity and success.
- Improved interpersonal skills by answering questions and provided clear customer service to on-campus guests.

Hawaii Drone Academy Intern **June 2016 – July 2016**

- Co-led a week-long workshop to teach and engage middle school students on building an FPV Drone Racer. At the end of the workshop, students were able to operate and fly their drones.
- Compiled photos and videos in a power point presentation to teach others how to build the FPV Drone Racer and researched hundreds of company contacts to expand the Academy's network.

EXTRACURRICULARS

USC Autonomous Underwater Vehicle (AUV) *(Computer Vision Software Team)* **Jan 2018 – Present**

- Meets 4hrs/week; Used TensorFlow, Python 2.7, and Google-SDK to train images for under water object recognition.
- The AUV is now capable of accurately recognizing important obstacles for the RoboSub competition.

USC (MEDesign): *Breathalyzer Team* **Aug 2017 – Present**

- Meets 4hrs/week; Collaborated & prototyped a working breathalyzer using a PCB, SolidWorks, and Arduino by engaging in discussion and implementation of the project's design and future steps.
- Engaged in weekly general meetings for networking presentations and engineering workshops.

McKinley High School Student Body Treasurer **2016 – 2017**

- Chaired and collaborated with teachers, student body, and council members to smoothly plan and execute homecoming events, banquets, proms, assemblies, luncheons, and galas.
- Improved previous event success through assessing issues, improving communication within the council, advertising events through social media, and constructing solutions that improved student body participation and satisfaction.

McKinley Math Team *(Varsity Member)* **2013 – 2017**

- Taught event workshops and organized team bonding activities by collaborating with Team Captains to improve performance at competitions. Member's work ethic and sense of family was improved because of our efforts.
- Consistent team placement of 2nd-4th Oahu Mathematics League (Varsity) at competitions.

McKinley Highschool Science Olympiad *(Event Captain)* **2014 – 2017**

Ranked Events: Air Trajectory, Bridge Building, Dynamic Planet, Hydrogeology, Wind Power, Anatomy & Physiology

- Researched, compiled, and collaborated to create event guidelines and data sheets to ensure event success and ensured collaboration between team members for their respective events. Monitored event progress and student participation.
- Designed, built, and tested bridges and devices which led winning 1st-3rd place in respective events.

McKinley Center for Tomorrow's Leaders *(Ambassador)* **2013 – 2017**

- Organized a landlord summit that assembled homeless families in Hawaii, government representatives, and about 30 landlords to discuss the Housing First initiative. Efforts led to housing 2 families. **Nov 2015 – 2016**
- Engaged middle school students in STEM and leadership. Encouraged self-directed problem solving for issues within their middle school and guided them in customizing/building their own garden designs. **Nov 2016 – 2017**

PROJECTS & SKILLS

Application and Interface for Real-Time Item Seeking **Oct 2015 – March 2016**

- Collaborated with a partner to create a C++ application using OpenCV & Microsoft Visual Studios that detects motion and tracks objects in a live video feed through image differencing.
- Compiled and presented a science fair board detailing the project's scientific method to judges in the Regional & State Science Fair levels. Awarded 3rd Place in Systems Software at the 2016 Hawaii State Science & Engineering Fair.

C++, HTML, CSS, Arduino, Breadboarding, Soldering, Circuit Design, 1Sheeld+, Excel, Word

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WORK EXPERIENCE

Shifted Energy Student Intern **June 2018 – Aug 2018**

- Work done
- Skills used

Radial 3D Student Intern **May 2018 – Aug 2018**

- Work done
- Skills used

University of Hawaii at Manoa Student Researcher **May 2018 – Aug 2018**

- Work done
- Skills used

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- Skills used

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- Investigating the feasibility and implementation of automatic osteology landmark identification from 3D computed tomography volumes using the Insight Segmentation and Registration Toolkit.

University of Hawaii at Manoa Student Researcher May 2018 – Aug 2018

- Implementing the Stanford Parser and autocorrection APIs to fix text warnings about tsunamis, earthquakes, and volcano events for the Pacific Disaster Center.

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